

## **REMARKS/ARGUMENTS**

### **State of the Claims**

Claims 21 to 27 are withdrawn because they are drawn to the non-elected invention. Claims 28 to 35 are pending in this application.

In the Office Action, claims 28 and 29 were objected to because of an informality, claims 28 to 31 were rejected under 35 USC § 112, second paragraph, claims 28 to 30 and 32 to 34 were rejected under 35 USC § 103(a) as being unpatentable over Rast Jr. (US 4,357,884) in view of Demuth (US 3,511,032), and claims 31 and 35 were rejected under 35 USC § 103(a) as being unpatentable over Rast Jr. (US 4,357,884) in view of Demuth (US 3,511,032) in further view of Audineau et al (EP 0465327 A2).

### **Claim Objections**

Claims 28 and 29 were objected to because of informalities. In claim 28, the use of the term "ground cover" led to the objection, whereas in claim 29, the use of the term "tentacled anchoring formations" led to the objection.

Claim 28 is hereby amended to include the wording of cancelled claim 21. It is now clear from claim 28 that the term "tentacled plant anchor and ground cover" refers to a single item which comprises more than one part, namely a membrane strip and tentacle anchoring formations on an upper side of the membrane strip. The clarifying amendment to claim 28 also removes any lack of clarity that may have existed in respect of claim 29, as it is now clear that the membrane strip forms one ply and the tentacle anchoring formations form another ply. It is thus respectfully requested that the objections to claims 28 and 29 be withdrawn.

### **Claim Rejection – 35 USC § 112**

Claims 28 to 31 stand rejected under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention. This rejection is based on the apparent contradiction between the language "water-imperious membrane strip" and the language "through apertures", respectively of lines 2 and 6 of claim 28. In response, the

Applicant is amending claim 28 herewith to clarify that the membrane strip is of a water-impervious material, thus removing any possibly contradiction in the language of claim 28. It is accordingly also respectfully requested that the rejection of claims 28 to 31 on the basis of 35 USC § 112, be withdrawn.

**Claim Rejection – 35 USC § 103**

Claims 28 to 30 and 32 to 34 stand rejected under 35 USC § 103(a) as being unpatentable over Rast Jr. (US 4,357,884) in view of Demuth (US 3,511,032). The Applicant respectfully but strongly disagrees that the subject matter of claims 28 to 30 and 32 to 34 is obvious in the light of Rast Jr. and Demuth.

The present invention, as claimed in independent claims 28 and 32, is aimed at limiting wind damage to fairly mature tentacled plants. In other words, the method of the invention is intended to benefit tentacled plants in an advanced stage, i.e. when they shoot tendrils and thereafter. It is important to note that the method of the invention as claimed in claims 28 and 32 provides an increase in harvest yield for tentacled plants which is not based in any way whatsoever on the planting method used for seedlings, but on assisting more mature plants to anchor themselves thereby to reduce, *inter alia*, wind damage. This underlying principle is not recognized by Rast Jr. or Demuth, either alone or in combination.

**US 4,357,884 (Rast Jr.)**

Rast Jr. indeed discloses a method of improving harvest yield, which can also be used for tentacled plants, by providing a membrane strip of a water-impervious material, securing the membrane strip to the ground and planting tentacled plants or their seed through apertures in the membrane strip so that the plants can grow through the apertures, as indicated by the Examiner. Rast Jr. however does not disclose the use of a tentacled plant anchor and ground cover comprising a membrane strip of a water-impervious material which has a side which in use is a upper side on which a growing tentacled plant can be supported, and tentacle anchoring formations on the upper side of the membrane strip for assisting a tentacled plant in the vicinity of the tentacled plant

anchor and ground cover to anchor itself thereto, with the tentacle anchoring formations allowing plant tentacles to grow in between the tentacle anchoring formations and the membrane strip. The use of a membrane strip in cultivating plants is indeed not new and the Applicant acknowledges as much on page 6 of the specification as published under International Publication No. WO 02/067661. Such membrane strips have a number of known advantages, including that fruit ripens earlier and more evenly, that fruit can be harvested over a longer period and that less chemical pest control is required. A membrane strip such as that disclosed by Rast Jr. can be used advantageously in conjunction with wind protectors with plants without tentacles and with plants with tentacles, as it gives improved seedling protection (see column 1, lines 10-12). This is in contrast to the method of the invention which uses a tentacled plant anchor and ground cover which shows specific additional benefits for tentacled plants which will not be realized for plants without tentacles, as the method is focused on stabilizing shoots and hence stabilizing leaf orientation to maximize photosynthesis. As will be appreciated, this advantageous effect cannot be established using a conventional membrane strip only during or directly after a windy period.

Rast Jr. is clearly focused in providing protection to seedlings for their survival during their early growth after transplanting (see column 2, lines 38-40). This is effected by providing protection for the normally exposed stem and foliage above the soil surface against excessive rain, wind, frost and other environmental conditions (see column 2, lines 46-51). In short, whereas the method of the present invention attempts to anchor tentacled plants by providing a cultivation accessory comprising a membrane strip in combination with tentacle anchoring formations, Rast Jr. attempts to provide wind breaks around each plant. Rast Jr. provides no teaching or suggestion that a tentacled plant anchor and ground cover comprising a membrane strip and tentacle anchoring formations can be used to reduce wind damage to tentacled plants. Instead, Rast Jr. merely teaches the use of a membrane strip in combination with protectors, i.e. wind breaks, around each plant. Put differently, Rast Jr. attempts to shield young plants against wind, whereas the method of the present invention is aimed at providing anchoring formations to young plants and does not attempt to provide any shielding

against the wind. Rast Jr. in fact thus teaches away from the present invention. The solution to the problem of wind damage proposed by Rast Jr. is thus very different to the solution proposed by the present invention, with Rast Jr. providing no hint, teaching or suggestion along the lines of the present invention. In view of the differences in approach between the present invention and Rast Jr., there is no reason for a person skilled in the art and considering the present invention to turn to Rast Jr. for inspiration. If coming across Rast Jr. by chance, a person will find no teaching or suggestion in this document to lead such a person to the present invention. Furthermore and importantly, such a person would also not find any suggestion or teaching or motivation in Rast Jr. to combine the teaching of Rast Jr. with the teaching of Demuth. In this regard, the Applicant has noted the Examiner's reasoning that it would be obvious to modify the method of Rast Jr. by laying the tentacle plant anchor on a ground cover as disclosed by Demuth so as to provide a means of harvesting crop. This statement is based on an incorrect understanding of the present invention. The present invention has nothing to do per se with the harvesting of crop, but improves harvest yield by protecting plants against wind damage and by maximizing photosynthesis, as hereinbefore stated. As Demuth deals with a different problem than wind protection, and makes no mention of anchoring plants using tentacle anchoring formations such as may be provided by a net, Demuth provides no reason to modify the teachings of Rast Jr. to come up with the present invention.

**US 3,511,032 (Demuth)**

Demuth relates to a process for harvesting, the process being particularly useful for rhizome plants such as blueberries. The method of Demuth comprises placing a weather-resistant net on a growing area at the beginning of a growth cycle. The mesh of the net is large enough for the stems to grow through but small enough to retain the fruit. Harvesting is accomplished by raising the net so as to strip and gather the fruit in the net. Demuth provides no teaching at all regarding anchoring of tentacled plants thereby to improve the harvest yield of the tentacled plants as a result of (i) the lessening of wind damage and (ii) the stabilization of leaf orientation to maximize

photosynthesis. As hereinbefore stated, Rast Jr. provides no incentive, teaching or motivation to combine its teachings with those of Demuth. Similarly, Demuth provides no teaching or motivation or suggestion to combine its teachings with those of Rast Jr. Demuth deals with a method for harvesting fruit using a net, whereas Rast Jr. deals with the protection of seedlings during their early growth after transplanting. A person wishing to find a way to limit wind damage and hence to improve harvest yield, will find no guidance in Demuth and would not on the basis of the teachings of Demuth have any reasonable expectation of success. Demuth addresses a different problem than the present invention and does not even hint at the solution provided by the present invention. In view of this, there is no reason or likelihood for a person wishing to address the problem addressed by the present invention to turn to Demuth for inspiration, and then to modify the teachings of Demuth, to suggest the present invention. If coming across Demuth by chance, a person will find no teaching or suggestion in this document that would steer such a person towards the present invention. If anything, exactly the opposite is likely to happen. Demuth teaches away from the present invention by teaching the use of a holding net below the weather-resistant net (for use with non-rhizome and weak root system plants, such as tomatoes). This is in contrast to the present invention, which teaches the use of a membrane strip of a water-impervious material in combination with tentacle anchoring formations, such as a net. Strengthening the Applicant's view that Demuth provides no teaching in respect of the present invention is the fact that Demuth teaches the use of a net with mesh in the order of magnitudes of  $\frac{1}{4}$  to  $\frac{1}{2}$  inch. This is much smaller than the preferred mesh of 8cm x 8cm (about 3.1 inch x 3.1 inch) of the present invention. This difference is not insignificant. Although the method of the invention can be used with a net with a mesh less than 8cm, it is to be appreciated that a smaller mesh would increase the chances that openings will be left between the net and the membrane strip. This is undesirable, as openings between the net and the membrane strip increases the probability that fruit will grow into the net and be caught by the net, as shown by the attached photograph. A further indication that Demuth teaches away from the present invention is the reference in Demuth to the use of a square net with dimensions of about

6 feet on each side. This is in stark contrast to the present invention in which the membrane strip, and accordingly the length of the component defining anchoring formations, e.g. a net, typically has a length of at least 500m.

The teachings of Rast Jr. are 25 years old and that of Demuth are 39 years old. If it was obvious to combine the teachings of Rast Jr. and Demuth in any way, and bearing in mind the devastating effect that wind damage may have on harvest yield of tentacled plants, one would expect textbooks dealing with the protection of plants, and in particular with tentacled plants, to provide the solution of the present invention. The fact that this is not the case, reinforces the Applicant's argument that the present invention is not obvious, particularly bearing in mind the qualifications of people preparing such textbooks, the age of Demuth and the fact that membrane strips have been used for many years. Although not wishing to be bound by theory, it appears to the Applicant that the fact that the present invention has not yet been suggested until now may be the result of experts focusing on structures to protect the plant against the wind, thus viewing the plant as a passive party in the fight against wind damage. In contrast, the Applicant follows a unique approach by not viewing the plant as a passive party but instead encouraging the plant by means of the present invention to actively partake in efforts to reduce wind damage by using its natural capabilities, i.e. the tentacles of the tentacled plant.

The combined effect of the use of a membrane strip and the tentacle anchoring formations as proposed by the present invention is important. The membrane strip provides a smooth surface enabling tentacle anchoring formations, such as those provided by a net, to lie flat on the surface, minimizing visually noticeable spaces between the net and the membrane strip. As previously indicated, this is important to reduce the risk of fruit growing into the strands of the net. Furthermore, the membrane strip prevents the strands of the net from embedding in the soil and thereby reducing the availability of anchor formations. The use of a ground cover, such as a membrane strip on its own, has known advantages, as set out hereinbefore. By also supplying

anchoring formations on the upper side of the membrane strip, thereby assisting cultivated plants to anchor themselves to the ground cover, the following additional unexpected synergistic advantages are provided:

- due to the anchoring of tentacles of a plant, wind damage to the plant is reduced significantly;
- plants are less susceptible to fungi, infections and stress when they are less disturbed;
- immature fruits are not moved about, which reduces abrasions and loss of fruit;
- natural wind breaks are sufficient to prevent wind damage to the plants and fruit and it is thus not necessary to erect artificial wind breaks, lowering input capital;
- the net strengthens the membrane strip, inhibiting wind damage to the membrane strip and thus allowing thinner membrane strips to be used, and use of the tentacled plant anchor and ground cover for a second harvest during the same season; and
- more mature fruit is produced per hectare, leading to higher net income per hectare.
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### **Conclusion**


Based on the above, Applicants respectfully submit that since independent claims 28 and 32 as originally filed and amended herein are novel and allowable over the prior art, all the dependent claims pending in the application are allowable. The application is now in condition for allowance, which allowance is earnestly solicited.

Appln No.: **10/505,403**  
Amendment dated September 6 2007  
Reply to Office Action of June 6, 2007

Attorney Docket No. **169-83339**

The Commissioner is hereby authorized to charge any additional fees which may be required in this application under 37 C.F.R. §§1.16-1.17 during its entire pendency, or credit any overpayment, to Deposit Account No. 06-1135. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, other-wise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 06-1135.

Respectfully Submitted,



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